

Application No.: 10/564,817
Amendment under 37 CFR 1.111
Reply to Office Action dated February 4, 2009
May 4, 2009

AMENDMENTS TO THE SPECIFICATION

Please substitute the paragraph beginning at page 3, line 6 and ending at page 3, line 15 to read as follows:

However, the above-mentioned conventional technique has the following problem. The above-mentioned data area managing method intends to speed up an access to an existing file and does not consider a free area retrieval processing. According to the above-mentioned data area managing method, although reaccess to the file accessed once can be performed at high speed, when retrieving [[an]] a free area and preparing a new file, the FAT needs to be newly read from the information recording medium because the FAT is not cached.

Please substitute the paragraph beginning at page 4, line 12 and ending at page 5, line 17 to read as follows:

The data area managing method for an information recording medium of the present invention is used in an information processor that manages data stored in an information recording area in the information recording medium as a file. When the

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information processor accesses [[to]] area management information that manages free area state and link state of the information recording area in the information recording medium, access size is changed according to processing content in the information processor.

The information processor of the present invention is a processor which accesses [[to]] an information recording medium managing data stored in an information recording area by a file system and which comprises: a FAT cache, a volatile memory, a FAT cache controller and a file system controller. The FAT cache reads and stores area management information which manages a free state and link state of said information recording area from said information recording medium. The volatile memory holds, data including a start address of each block, location of the area management information stored in each block on said information recording medium, size of each block, and presence or absence of update, as FAT cache management information for managing said FAT cache by dividing said FAT cache into a plurality of blocks. The FAT cache controller refers to and updates said FAT cache management information and controlling a read and change of said area management information to said FAT cache. The file system controller accesses to said area management information through

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said FAT cache controller and storing data in the information recording medium as a file.

Please substitute the paragraph beginning at page 11, line 23 and ending at page 12, line 16 to read as follows:

Assignment of [[an]] a free area is achieved by acquiring the free cluster from the FAT and changing the link of the FAT. A link changing procedure is as follows. First, an entry storing "0" representing a free cluster is acquired from the FAT 202 in Fig. 3B. In the case of Fig. 3B, a cluster with the cluster number 14 is a free cluster. Subsequently, the acquired free cluster is linked to termination of the link of the file to be extended its file size. Fig. 3C shows the state of the FAT 202 after changing the link and a destination to be linked to the cluster number 13 as the end of FILE1.TXT is changed to "14". A link destination to the cluster number 14 is changed to "0xFFFF" indicating the end of link. According to this processing, as shown in Fig. 3D, in FILE1.TXT, five clusters of "10", "11", "12", "13" and "14" are assigned as data region 203A for the file, 16001st to 16384th bytes are written to the area with the cluster number 13 and 16385th to 17000th bytes are written to the area with the cluster number 14 to perform writing of data.

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Please substitute the paragraph beginning at page 42, line 2 and ending at page 42, line 14 to read as follows:

Area management information is cached in a cache memory by controlling the access size when an information processor accesses the area management information in an information recording medium. When the processing content of the information processor is to retrieve [[an]] a free area from the area management information, a physical management block size determined from the physical characteristics of the information recording medium is used. When the processing content is to acquire a link destination from the area management information, minimum access unit of the information recording medium is used. Consequently, overhead can be lessened when the area management information is accessed.